

In the Claims:

Please cancel claims 22-24, replace claim 1, and add new claim 25, all as shown below.

1. (Currently Amended): A computer program product including a storage medium with instructions thereon for execution by a computer for dynamic code generation ~~dynamically generating program code~~, the instructions comprising:

~~computer code for dynamically generating program code, wherein dynamically generating program code includes:~~

computer code for creating a class file container object;

computer code for adding a method to the class file object;

computer code for adding code to the method using programming language constructs;

computer code for generating byte code for the class file container object; and

computer code for instantiating an instance of the new class file object;

computer code for generating executable code from the byte code by using a class loader; and

wherein dynamically generated code would be configured to exist for the life of a server it resides upon.

2. (Original): The computer program product of claim 1 wherein creating a class file container object includes:

setting attributes for a class file.



3. (Previously Presented): The computer program product of claim 2 wherein the attributes include a class file name and a parent super class.

4. (Original): The computer program product of claim 1 wherein adding a method to the class file object includes:

adding a plurality of methods to the class file object.

5. (Previously Presented): The computer program product of claim 1 wherein the programming language constructs correspond to programming language statements, expressions, and variables.

6. (Previously Presented): The computer program product of claim 5 wherein the programming language constructs include parameters.

7. (Previously Presented): The computer program product of claim 5 wherein each statement, expression type, and variable is represented as an object.

8. (Previously Presented): The computer program product of claim 1 wherein generating byte code for the class file container object includes:

generating an intermediate representation of program flow.

9. (Previously Presented): The computer program product of claim 8 wherein generating byte code for the class file container object includes:

converting the intermediate representation into byte code.



10. (Original): The computer program product of claim 1 wherein the program code implements an adaptor class.

11. (Original): The computer program product of claim 1 wherein the program code implements a proxy class.

12. (Previously Presented): The computer program product of claim 1 further comprising program code for:

repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object.

13. (Previously Presented): The computer program product of claim 12 wherein the program code for repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object includes program code for:

determining a number of methods associated with the stub in a remote interface.

14. (Previously Presented): The computer program product of claim 1 wherein the program code for adding code to the method includes program code for:

repeatedly adding code for each method added to the class file.



15. (Previously Presented): The computer program product of claim 1 wherein at least one of the program code for adding a method to the class file and the program code for adding code to the method includes program code for:

generating a tree of statements.

16. (Previously Presented): The computer program product of claim 15 wherein the program code for generating a tree of statements includes program code for:

generating a tree representing at least one method, the at least one method comprising at least one of: a code statement, an expression, a variable and a programming construct.

17. (Previously Presented): The computer program product of claim 15 wherein the program code for generating a tree of statements includes program code for:

generating a tree forming a known structure when the class file container is a known type.

18. (Previously Presented): The computer program product of claim 17 wherein the program code for generating a tree forming a known structure when the class file container is a known type includes program code for:

generating a tree forming a known structure when the class file container is of at least one of an adapter and a proxy type.

19. (Previously Presented): The computer program product of claim 1 wherein the program code for generating byte code for the class file container object includes program code for:

maintaining a state of a program being generated by each statement.



20. (Previously Presented): The computer program product of claim 19 wherein the program code for maintaining a state of a program being generated by each statement includes program code for:

maintaining at least one of a content of a stack, a content of a variable in use during program flow.

21. (Previously Presented): The computer program product of claim 20 further comprising program code for:

generating an intermediate representation of program flow based upon the at least one of a content of a stack, a content of a variable in use during program flow.

22 - 24. (Canceled)

25. (New): The computer program product of claim 1, wherein the dynamically generated code is used for remote method invocation skeletons, remote method invocation stubs, wrappers for JDBC connections, and proxies used to enforce call-by-value semantics between EJBs.